KARAKTERISTIK FISIK, KIMIA, DAN SENSORIS MI BASAH BERBASIS TEPUNG KOMPOSIT UWI (*Dioscorea spp.*), KORO PEDANG (*Canavalia ensiformis*) DAN TEPUNG TERIGU DENGAN VARIASI PROPORSI BAHAN PENGIKAT

Desti Rahmatika

H0914020

RINGKASAN

Mi basah merupakan salah satu makanan yang cukup digemari oleh masyarakat Indonesia. Gandum sebagai bahan baku utama tepung terigu sampai saat ini masih diimpor. Upaya untuk mengurangi impor gandum dapat dilakukan dengan memanfaatkan pangan lokal seperti uwi dan koro pedang menjadi tepung komposit. Tepung komposit diharapkan dapat mengurangi impor gandum serta menambah nilai gizi pada suatu produk. Penambahan hidrokoloid (karagenan) berfungsi sebagai pembentuk tekstur pengganti fungsi gluten pada tepung terigu. Penelitian dilakukan dengan tujuan untuk mengetahui pengaruh penambahan bahan pengikat (karagenan) terhadap karakteristik fisik, kimia, dan sensoris mi basah berbasis tepung komposit uwi, koro pedang, dan tepung terigu serta mengetahui formula terbaik berdasarkan ketiga karakteristik tersebut. Variasi penambahan karagenan yang digunakan adalah 0%, 1%, 2%, dan 3%. Penelitian dilakukan dengan menggunakan rancangan acak lengkap (RAL). Hasil penelitian menunjukkan bahwa perlakuan penambahan karagenan berpengaruh secara signifikan terhadap karakteristik kimia, fisik, dan sensoris, tetapi tidak mempengaruhi aroma pada uji sensoris. Penambahan karagenan meningkatkan kadar air, kadar abu, kadar protein, daya serap air, *cooking time*, tetapi menurunkan kadar lemak, kadar karbohidrat, *tensile strength*, nilai FMax, dan parameter sensoris kecuali aroma. Formula terbaik mi basah yaitu mi basah F1 dengan penambahan 1% karagenan. Karakteristik dalam mi basah F1 yaitu kadar air sebesar 68,2442%, kadar abu 6,5809%, kadar lemak 6,2893%, kadar protein 9,6597%, kadar karbohidrat 9,2259%, daya serap air 29%, *cooking time* 2,9583 menit, *tensile strength* 0,018 MPa, FMax 2,0929 N.

Kata kunci: Mi Basah, Uwi, Koro Pedang, Karagenan, Tepung Komposit.

THE PHYSICAL, CHEMICAL, AND SENSORY CHARACTERISTICS OF WET NOODLE WITH WATER YAM (*Dioscorea alata*), JACK BEAN (*Canavalia ensiformis*) AND WHEAT FLOUR BASED COMPOSITE FLOUR WITH VARIATION OF BINDING MATERIALS PROPORTION

Desti Rahmatika

H0914020

SUMMARY

Wet noodle is one of the foods favored by Indonesian people. Wheat as the main raw material for wheat flour is still imported. The efforts to reduce wheat imports can be done by utilizing local foods such as water yam and jack bean into composite flour. Composite flour is expected to reduce wheat imports and increase the nutritional value of a product. Addition of hydrocolloid is used for replacement of gluten in wheat flour. This research was done in order to determine the effect of binding materials (carrageenan) addition to the physical, chemical, and sensory characteristics of wet noodle with water yam, jack bean and wheat flour based composite flour and discover the best formula based on the three characteristics. The variation of carrageenan addition used was 0%, 1%, 2%, and 3%. This research was conducted using completely randomized design. The result of this research showed that the carrageenan addition has significant effect on the physical, chemical, and sensory characteristics, but it did not effect the aroma in the sensory test. The addition of carrageenan increased moisture, ash, protein, water absorption, cooking time, but decreased fat, carbohydrate, tensile strength, FMax value, and sensory characteristics except flavour. The best noodle was noodle with 1% carrageenan addition. The best noodle had characteristics 68.2442% moisture, 6.5809% ash, 6.2893% fat, 9.6597 protein, 9.2259% carbohydrate, water absorption 29%, cooking time 2.9583 minutes, tensile strength 0.018 MPa, and FMax 2.0929 N.

Keywords: Wet Noodle, Water Yam, Jack Bean, Carrageenan, Composite Flour